

<b>BOAT</b> Name <b>Nicole4</b> Sail Nr <b>FIN-45</b>	<b>GPH</b> <b>571.3</b>	<b>HULL</b> Length Overall <b>12.350m</b> Maximum Beam <b>3.646m</b> Displacement <b>7,020kg</b> Draft <b>2.334m</b> Plan Review IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0.012%</b> Hull Construction <b>Cored</b> Carbon Rudder <b>No</b> Crew Arm Extension <b>0.00</b>
<b>GENERAL</b> Class <b>X-41</b> Designer <b>Jeppesen</b> Builder <b>X-Yachts</b> Series <b>12/2006</b> Age Age Allowance <b>0.455%</b> Offset File <b>Fin45X41.off - 15/05/2019 12:13:36</b> Measurement by - <b>17/06/2020</b>		IMSL <b>11.146m</b> VCGD <b>-0.159m</b> Sink <b>23.23kg/mm</b> RL <b>10.164m</b> VCGM <b>-0.184m</b> WS <b>31.47m<sup>2</sup></b> LSM0 <b>11.056m</b> Displacement/Length ratio <b>5.1945</b>



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<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>555.5</b>			<b>621.2</b>		
Time on Time	<b>1.0801</b>			<b>1.0867</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>651.2</b>	<b>506.8</b>	<b>453.3</b>	<b>840.8</b>	<b>622.9</b>	<b>544.8</b>
Time on Time	<b>1.0365</b>	<b>1.3318</b>	<b>1.4892</b>	<b>0.8028</b>	<b>1.0836</b>	<b>1.2391</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>956.5</b>	<b>786.2</b>	<b>695.6</b>	<b>662.3</b>	<b>649.2</b>	<b>643.1</b>	<b>629.7</b>
52°	<b>624.9</b>	<b>523.6</b>	<b>479.6</b>	<b>465.0</b>	<b>459.4</b>	<b>456.7</b>	<b>449.6</b>
60°	<b>589.5</b>	<b>502.2</b>	<b>467.3</b>	<b>452.9</b>	<b>446.7</b>	<b>443.4</b>	<b>437.0</b>
75°	<b>562.6</b>	<b>488.0</b>	<b>458.5</b>	<b>440.9</b>	<b>428.3</b>	<b>421.2</b>	<b>414.8</b>
90°	<b>567.5</b>	<b>489.0</b>	<b>457.9</b>	<b>438.5</b>	<b>420.6</b>	<b>404.9</b>	<b>386.2</b>
110°	<b>582.3</b>	<b>484.5</b>	<b>447.5</b>	<b>423.9</b>	<b>408.5</b>	<b>395.4</b>	<b>375.1</b>
120°	<b>597.2</b>	<b>492.8</b>	<b>451.9</b>	<b>424.9</b>	<b>398.9</b>	<b>379.6</b>	<b>354.8</b>
135°	<b>660.7</b>	<b>534.0</b>	<b>471.3</b>	<b>442.5</b>	<b>416.4</b>	<b>390.3</b>	<b>337.9</b>
150°	<b>781.2</b>	<b>622.1</b>	<b>526.2</b>	<b>472.6</b>	<b>444.8</b>	<b>420.6</b>	<b>373.0</b>
Run VMG	<b>902.1</b>	<b>718.4</b>	<b>607.6</b>	<b>538.9</b>	<b>493.1</b>	<b>458.8</b>	<b>412.1</b>

**Certificate**  
Number **00045**  
ORC Ref **03290000L9F**  
Issued On **23/06/2020**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**

**Crew Weight**  
Default 794kg  
Maximum **870kg**  
Minimum\* **653kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**  
ToD ToT  
Non Spin GPH **604.3 0.9929**  
Non Spin OSN **588.1 1.0202**

<b>Selected Courses</b>							
Windward / Leeward	<b>929.3</b>	<b>752.3</b>	<b>651.6</b>	<b>600.6</b>	<b>571.2</b>	<b>551.0</b>	<b>520.9</b>
Circular Random	<b>783.7</b>	<b>633.8</b>	<b>554.3</b>	<b>508.7</b>	<b>480.6</b>	<b>461.6</b>	<b>435.3</b>
Coastal / Long Distance	<b>926.6</b>	<b>707.1</b>	<b>589.4</b>	<b>525.9</b>	<b>491.2</b>	<b>462.9</b>	<b>416.7</b>
Non Spinnaker	<b>843.1</b>	<b>676.0</b>	<b>585.5</b>	<b>532.7</b>	<b>499.9</b>	<b>478.1</b>	<b>449.2</b>

**Sails Limitations**  
Headsails **6** Spinnakers **4**

<b>Velocity Prediction in Knots for True Wind Speeds</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	<b>42.8°</b>	<b>41.6°</b>	<b>40.5°</b>	<b>39.0°</b>	<b>38.3°</b>	<b>38.6°</b>	<b>38.4°</b>
Beat VMG	<b>3.76</b>	<b>4.58</b>	<b>5.18</b>	<b>5.44</b>	<b>5.55</b>	<b>5.60</b>	<b>5.72</b>
52°	<b>5.76</b>	<b>6.88</b>	<b>7.51</b>	<b>7.74</b>	<b>7.84</b>	<b>7.88</b>	<b>8.01</b>
60°	<b>6.11</b>	<b>7.17</b>	<b>7.70</b>	<b>7.95</b>	<b>8.06</b>	<b>8.12</b>	<b>8.24</b>
75°	<b>6.40</b>	<b>7.38</b>	<b>7.85</b>	<b>8.16</b>	<b>8.41</b>	<b>8.55</b>	<b>8.68</b>
90°	<b>6.34</b>	<b>7.36</b>	<b>7.86</b>	<b>8.21</b>	<b>8.56</b>	<b>8.89</b>	<b>9.32</b>
110°	<b>6.18</b>	<b>7.43</b>	<b>8.04</b>	<b>8.49</b>	<b>8.81</b>	<b>9.11</b>	<b>9.60</b>
120°	<b>6.03</b>	<b>7.31</b>	<b>7.97</b>	<b>8.47</b>	<b>9.02</b>	<b>9.48</b>	<b>10.15</b>
135°	<b>5.45</b>	<b>6.74</b>	<b>7.64</b>	<b>8.14</b>	<b>8.65</b>	<b>9.22</b>	<b>10.66</b>
150°	<b>4.61</b>	<b>5.79</b>	<b>6.84</b>	<b>7.62</b>	<b>8.09</b>	<b>8.56</b>	<b>9.65</b>
Run VMG	<b>3.99</b>	<b>5.01</b>	<b>5.92</b>	<b>6.68</b>	<b>7.30</b>	<b>7.85</b>	<b>8.73</b>
Gybe Angles	<b>142.6°</b>	<b>147.0°</b>	<b>150.0°</b>	<b>156.0°</b>	<b>170.0°</b>	<b>180.0°</b>	<b>180.0°</b>

**Class Division Length**  
CDL = **10.648**

**Storm Sails Areas**  
Heavy Weather Jib **39.43**  
Storm Jib (JL=11.11) **14.61**  
Storm Trysail **15.53**

**Owner**

<b>BOAT</b>	
Name <b>Nicole4</b> File <b>L-0045</b>	Sail Nr <b>FIN-45</b> Data in <b>meters/kilograms</b>
<b>RIG</b>	
Forestay Tension <b>Aft</b>	Spreaders <b>2</b>
Inner Stay <b>None Fitted</b>	Runners/Checkstays <b>0</b>
Carbon Mast <b>Yes</b>	Jib Furler <b>No</b>
Fiber Rigging <b>No</b>	Main Furler <b>No</b>
Non-Circular Rigging <b>No</b>	
Articulated Bowsprit <b>No</b>	
P <b>16.096</b>	E <b>5.510</b> MDT1 <b>0.131</b> MW <b>0.258</b>
IG <b>17.010</b>	J <b>4.921</b> MDL1 <b>0.258</b> GO <b>0.281</b>
ISP <b>18.182</b>	SFJ <b>0.280</b> MDT2 <b>0.122</b> BD <b>0.270</b>
BAS <b>1.885</b>	SPL <b>5.160</b> MDL2 <b>0.190</b> MWT <b>214.00</b>
FSD <b>0.036</b>	TPS TL <b>1.030</b> MCG <b>5.800</b>

<b>INCLINING TEST AND FREEBOARDS</b>		
Inclining Test <b>Boom Inclining</b>	LCFD	
Flotation date <b>17/06/2020</b>	SG <b>1.0050</b>	
FFM <b>1.437</b>	FF <b>1.450</b>	SFFP <b>0.200</b>
FAM <b>1.075</b>	FA <b>1.080</b>	SAFP <b>11.995</b>
W1 <b>137.0</b>	PD1 <b>290.9</b>	WD <b>5.508</b>
W2 <b>137.0</b>	PD2 <b>289.9</b>	GSA <b>1.0</b>
W3 <b>137.0</b>	PD3 <b>286.3</b>	RSA <b>1.0</b>
W4 <b>137.0</b>	PD4 <b>288.2</b>	PLM <b>9000.0</b>
LCF from stem on CL / on sheer	<b>6.960 / 7.169</b>	
Maximum beam station from stem	<b>8.432</b>	
RM Measured	<b>205.8kg-m</b>	
RM Default	<b>203.5kg-m</b>	
Limit of positive stability / Stab.Index	<b>127.9° / 131.8</b>	
Freeboard at mast at 5.201	<b>1.206</b>	



**2020**  
IMS Measurement  
Certificate

<b>MIZZEN RIG AND SAILS</b>	
N/A	

<b>PROPELLER</b>		
Installation <b>Strut</b>	PRD <b>0.435</b>	
Type <b>Folding 2 blades</b>	PBW <b>0.125</b>	
Twin Screw <b>No</b>	PIPA <b>0.0041</b>	
ST1 <b>0.065</b>	ST3 <b>0.180</b>	ST5 <b>0.345</b>
ST2 <b>0.180</b>	ST4 <b>0.110</b>	EDL <b>1.880</b>

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<b>COMMENTS</b>	
ADVERTISING LICENSE 2020 BY FSBF	

<b>MOVABLE BALLAST</b>	
N/A	

<b>CENTERBOARD</b>	
N/A	

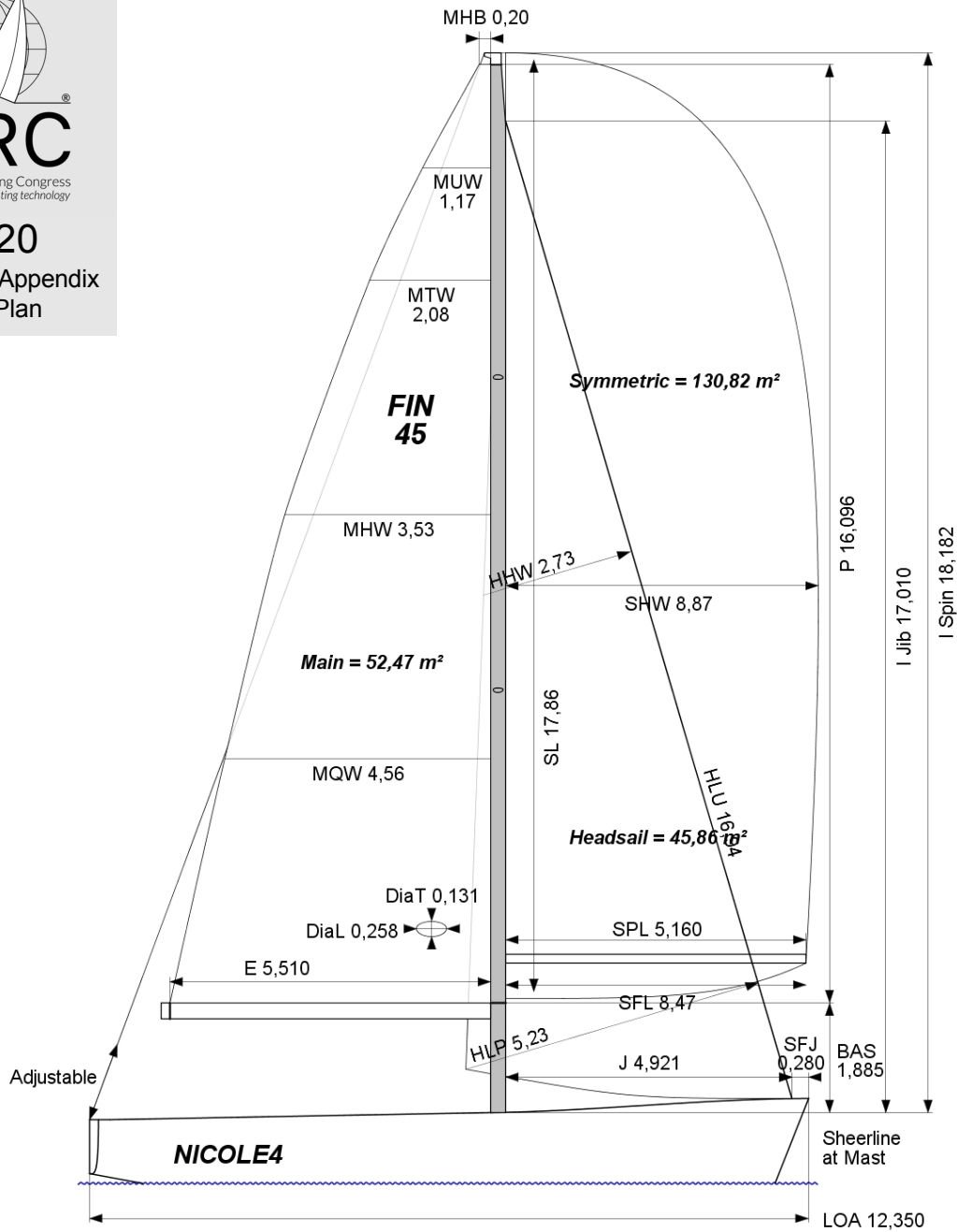


<b>SAILS (Maximum Areas)</b>									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.20	1.17	2.08	3.53	4.56	52.47	53.47	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL	130.82		SL · (SFL + 4·SHW) / 6	
	17.86	17.86	17.86	8.87	8.47				
Asymmetric	Not Available								

<b>HEADSAILS</b>												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
<b>HHB</b>	<b>HUW</b>	<b>HTW</b>	<b>HHW</b>	<b>HQW</b>	<b>HLP</b>	<b>HLU</b>	<b>Area</b>	<b>Btn</b>	<b>Flying</b>	<b>Meas.Date</b>	<b>Material</b>	<b>Comment</b>
0.14	0.81	1.47	2.73	3.98	5.23	16.94	45.86	Y	No	16/06/2019	Unknow	
0.14	0.80	1.46	2.70	3.96	5.22	16.91	45.51	Y	No	10/06/2018	Carbon	
0.13	0.75	1.42	2.71	3.97	5.21	16.97	45.50	Y	No	05/07/2012	Carbon	3DL
0.14	0.80	1.44	2.67	3.94	5.20	16.88	45.13	Y	No	10/06/2018	Carbon	
0.12	0.75	1.42	2.68	3.87	5.21	17.00	45.07	Y	No	05/07/2012	Carbon	3DL
0.11	0.75	1.39	2.64	3.90	5.23	16.92	44.78	Y	No	27/03/2019	Unknow	

<b>MEASUREMENT INVENTORY</b>				
Measurer				
Date <b>17/06/2020</b>				
Comment				
<b>Internal Ballast total = 30.0</b>				
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>
1	Engine	VP		D2
<b>Id</b>	<b>Item</b>	<b>Weight Description</b>		

<b>MEASUREMENT INVENTORY</b>									
<b>Id</b>	<b>Item</b>	<b>Tank Use</b>	<b>Tank Type</b>	<b>Capcty</b>	<b>Dist.</b>	<b>VCG</b>	<b>Condtn</b>	<b>Description</b>	
3	Tank	WATER		180.0	5.72			0-0 EMPTY	
1	Tank	FUEL		64.0	5.82			64-0 Full	
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>					
3	Ballast	30.0	4.96	Correction weight					
1	Battery		4.92	60+110 Ah					



**SAILS INVENTORY**

**MAINSAIL (1)**

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
3	0.20	1.17	2.08	3.53	4.56	52.48		26/03/2019	North Sails	Unknown	

**HEADSAILS (6)**

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
J1	0.14	0.81	1.47	2.73	3.98	5.23	16.94	106%	45.86	Y	No		16/06/2019	North Sails	Unknow	
L	0.14	0.80	1.46	2.70	3.96	5.22	16.91	106%	45.51	Y	No		10/06/2018	North Sails	Carbon	
L/M	0.13	0.75	1.42	2.71	3.97	5.21	16.97	106%	45.50	Y	No		05/07/2012	North Sails	Carbon	3DL
MED	0.14	0.80	1.44	2.67	3.94	5.20	16.88	106%	45.13	Y	No		10/06/2018	North Sails	Carbon	
M/H	0.12	0.75	1.42	2.68	3.87	5.21	17.00	106%	45.07		No		05/07/2012	North Sails	Carbon	3DL
J3	0.11	0.75	1.39	2.64	3.90	5.23	16.92	106%	44.78	Y	No		27/03/2019	North Sails	Unknow	

**SYMMETRIC SPINNAKERS (6)**

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
Heavy	17.85	17.86	17.86	8.87	8.47	130.79		01/07/2019	North Sails	Unknown	
S2	17.69	17.69	17.69	8.90	8.67	130.53		11/04/2019	North Sails	Unknown	
S1	17.95	17.95	17.95	8.77	8.54	130.50		27/03/2018	North Sails	Unknown	
1	17.92	17.92	17.92	8.77	8.51	130.19		21/06/2012	North Sails	Unknown	
Light	17.79	17.79	17.79	8.77	8.51	129.25		10/06/2018	One Sails	Unknown	White

**ASYMMETRIC SPINNAKERS (0)**

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
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